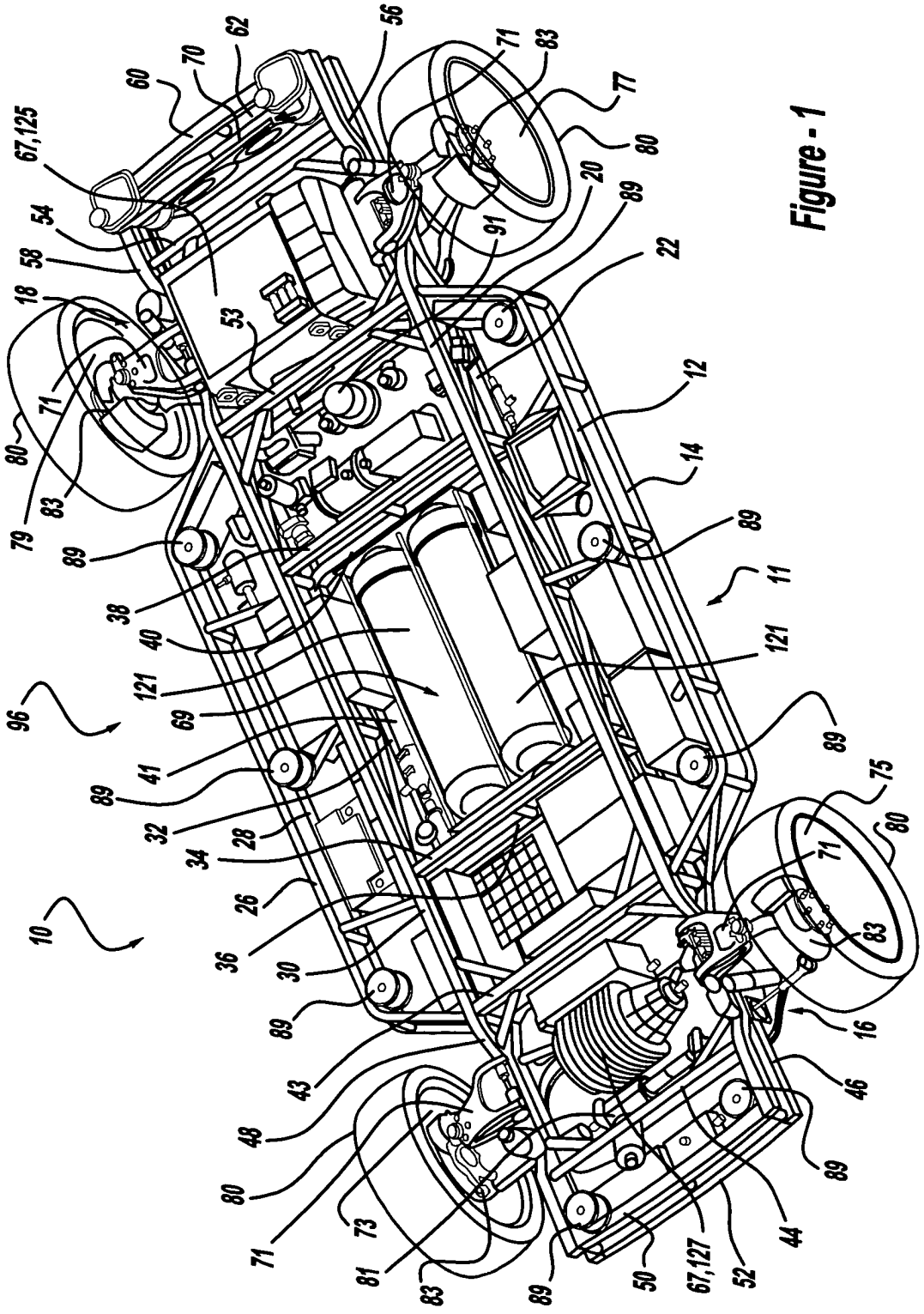
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44
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48
50
52
53
54
56
58
60
62
67,125
67,127
69
70
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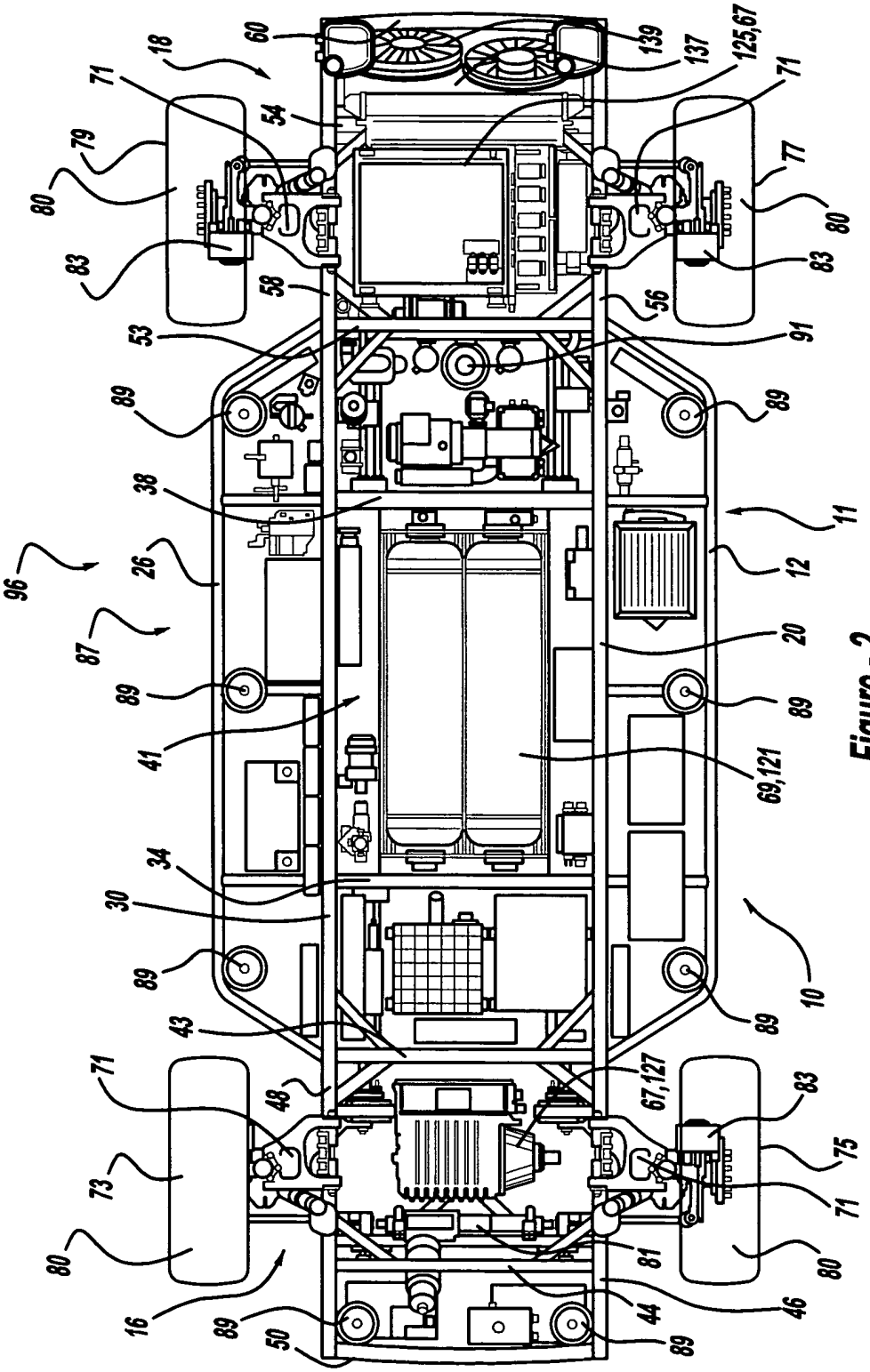
73
75
77
79
80
81
83
89
91
96
121

Figure - 1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38
96
26
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89
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48
73
80
16
89
50
139
137
125,67
71
77
80
83
56
91
89
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69,121
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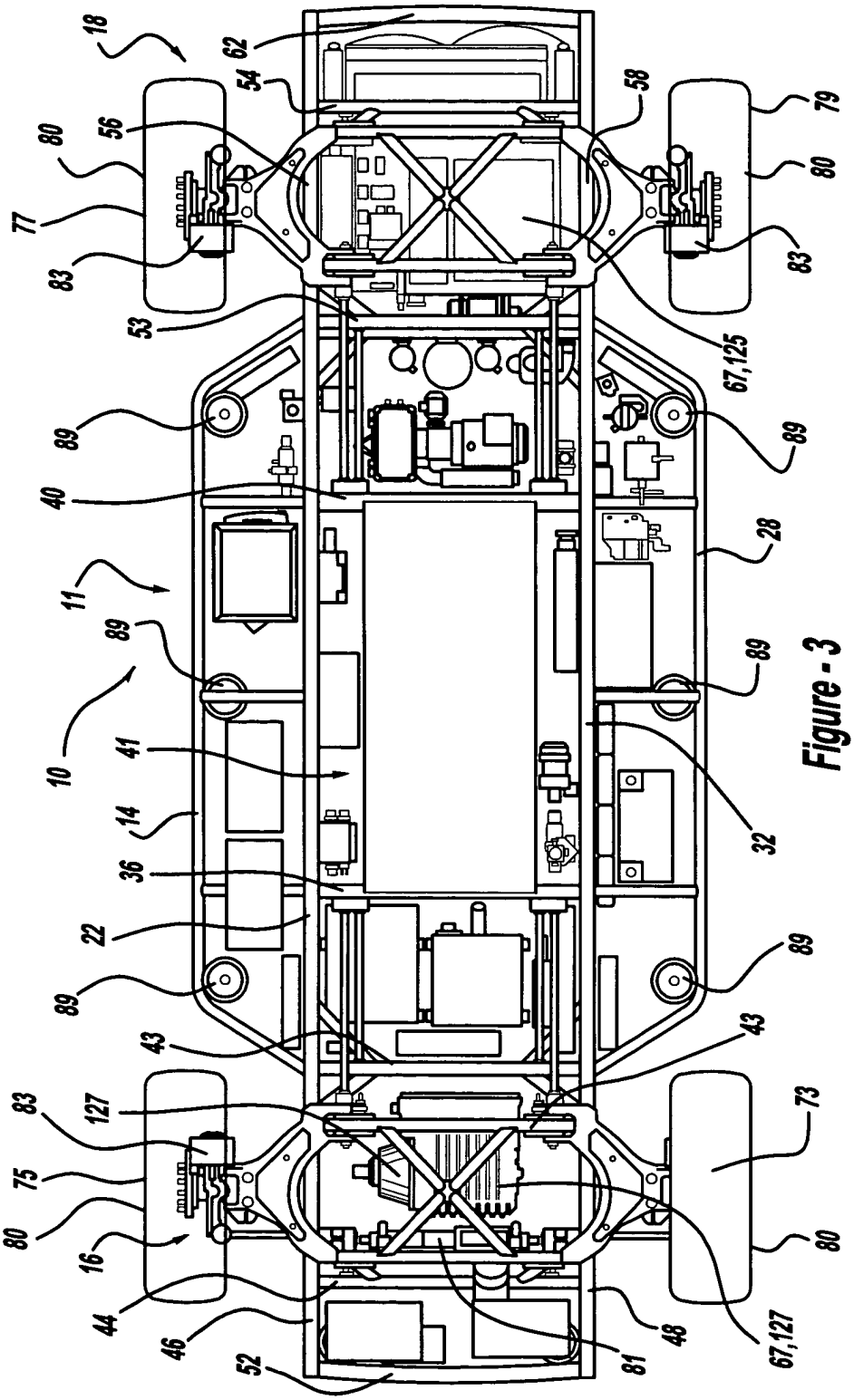
89
67,127
83
75
71
81
80
44
46
89

Figure - 2


18
62
54
58
56
79
80
77
80
83
83
53
67,125
89
89
40
28
11
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89
10
41
32
14
36
22
89
89
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83
127
73
75
80
80
16
44
46
52
81
48
67,127

Figure - 3

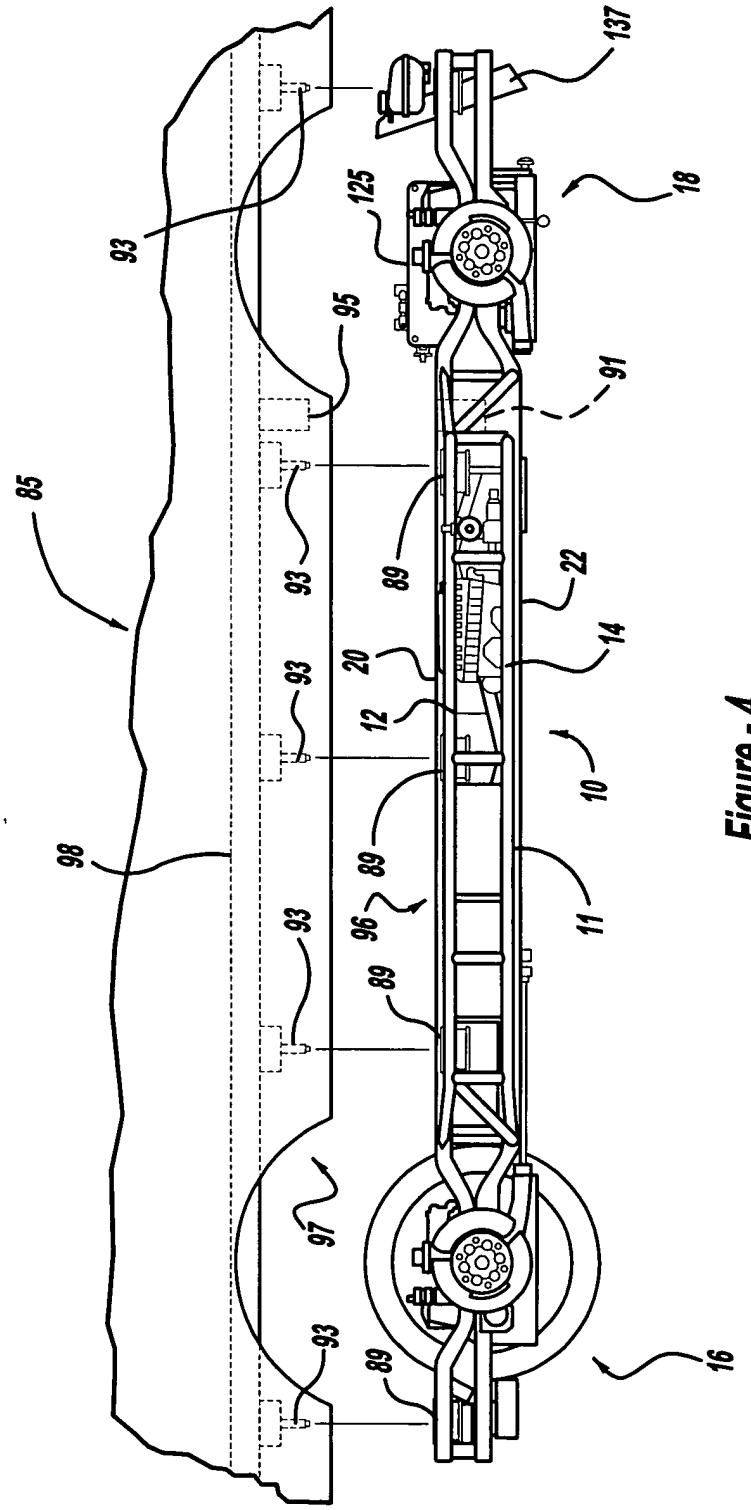

137
18
125
93
95
91
85
89
22
93
20
14
12
93
10
89
98
96
11
93
89
97
93
89
16

Figure - 4

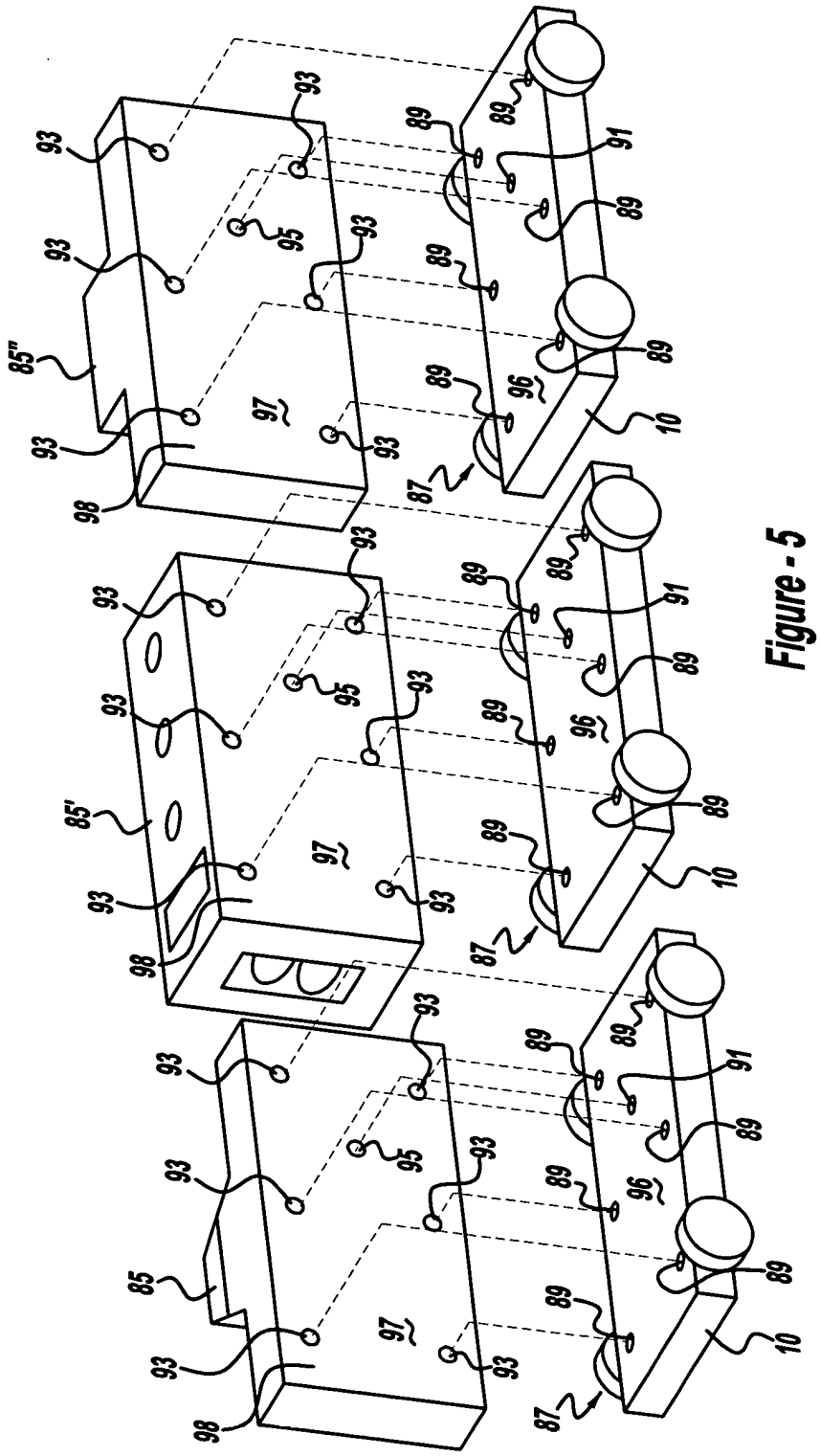


Figure - 5

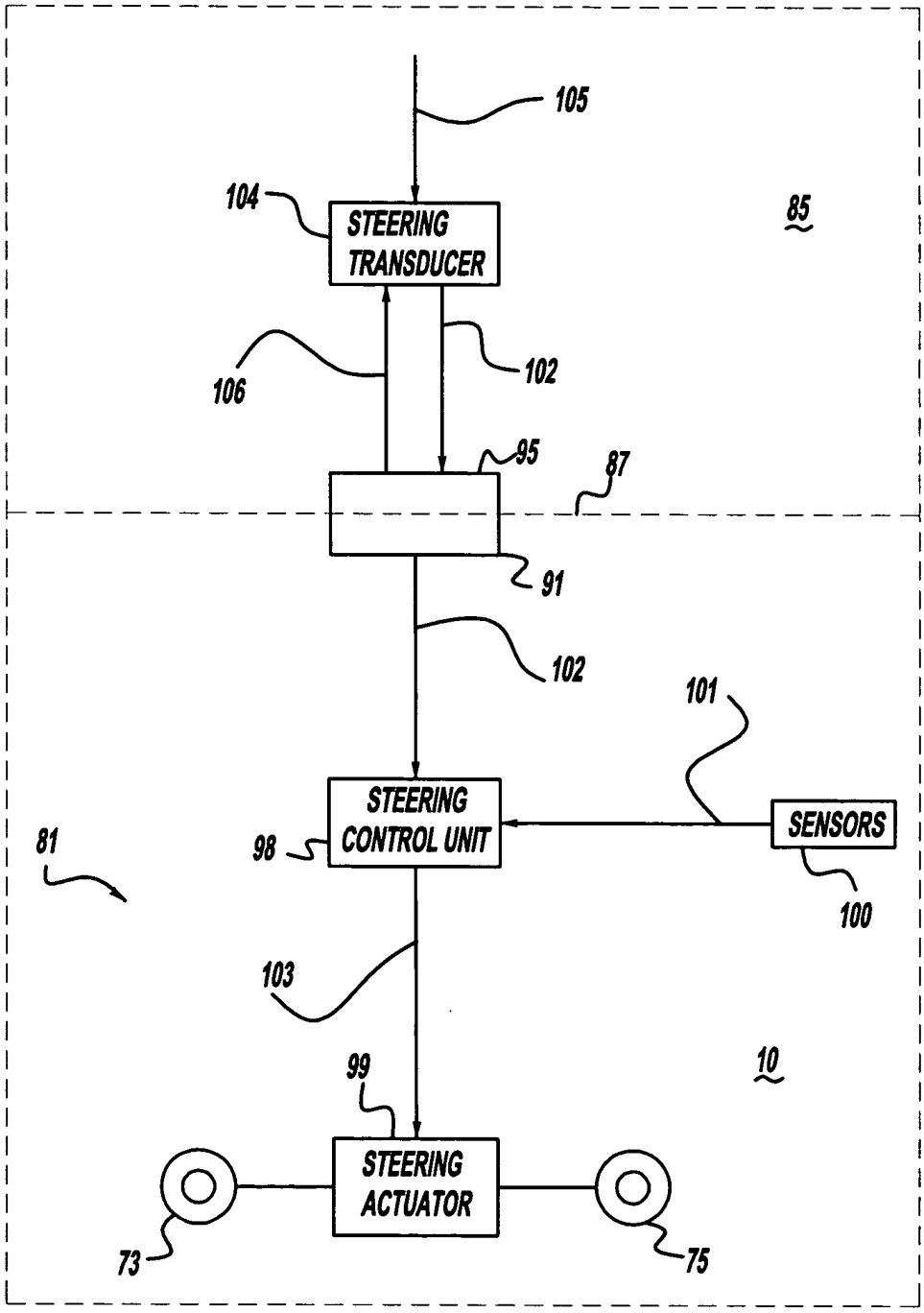

105
104
STEERING TRANSDUCER
85
106
102
95
87
91
102
101
STEERING CONTROL UNIT
SENSORS
81
98
100
103
99
10
STEERING ACTUATOR
73
75

Figure - 6

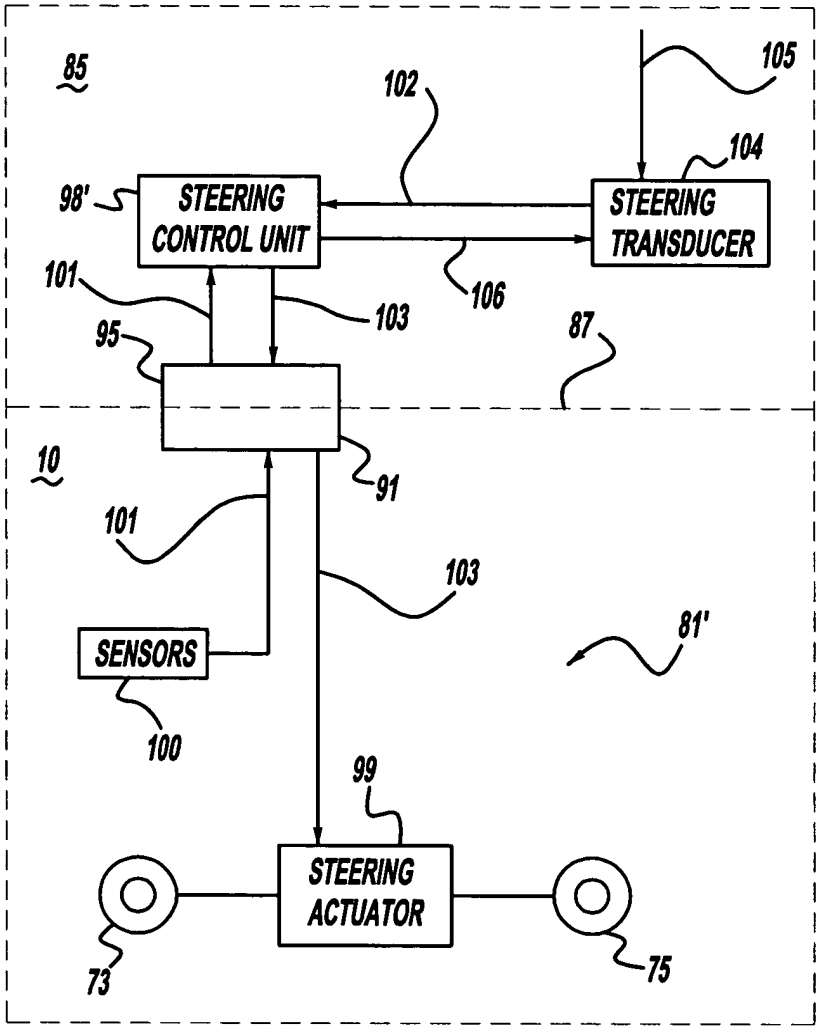

85
102
105
104
98'
STEERING CONTROL UNIT
STEERING TRANSDUCER
101
103
106
95
87
10
91
101
103
81'
SENSORS
100
99
STEERING ACTUATOR
73
75

Figure - 7

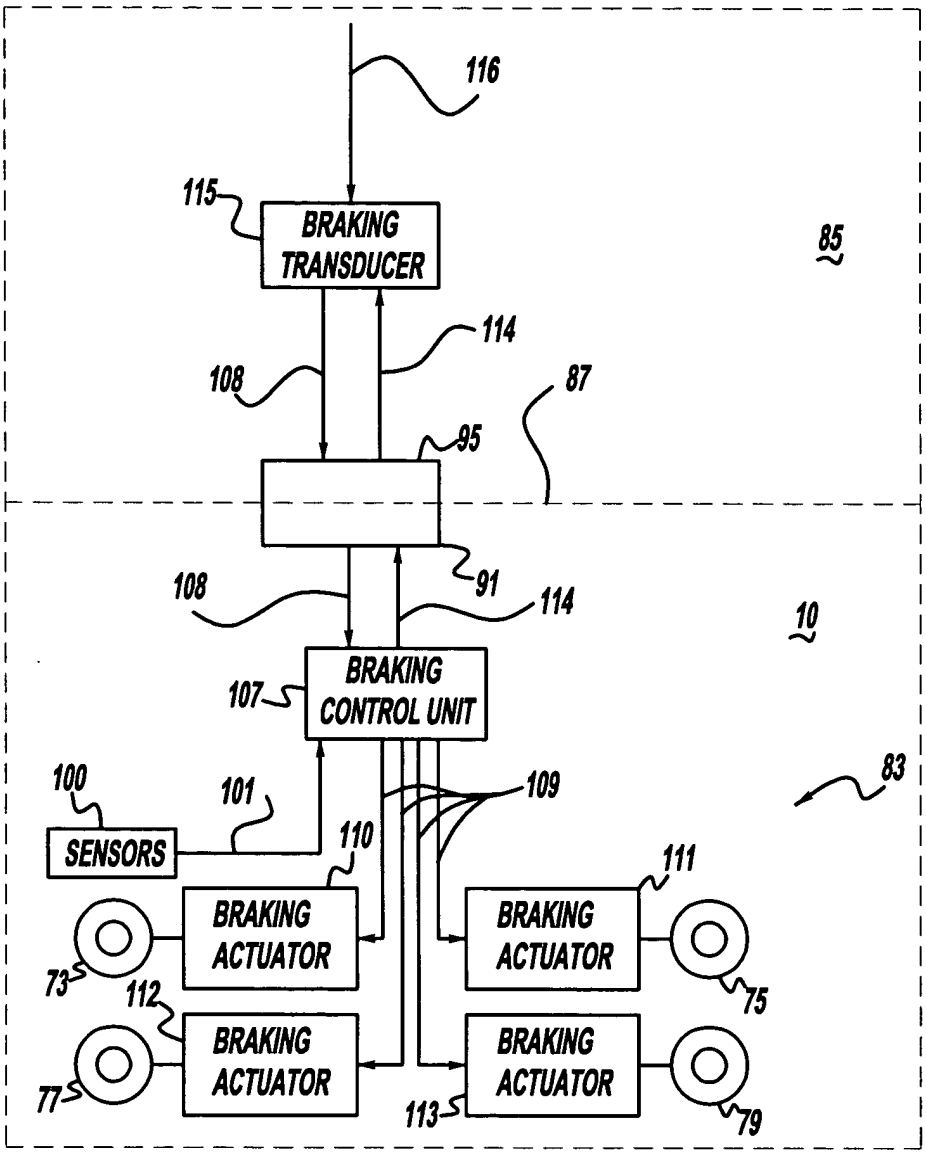

116
115
BRAKING TRANSDUCER
85
114
108
87
95
91
108
114
10
BRAKING CONTROL UNIT
107
100
101
109
83
SENSORS
110
111
BRAKING ACTUATOR
BRAKING ACTUATOR
73
75
112
BRAKING ACTUATOR
BRAKING ACTUATOR
77
113
79

Figure - 8

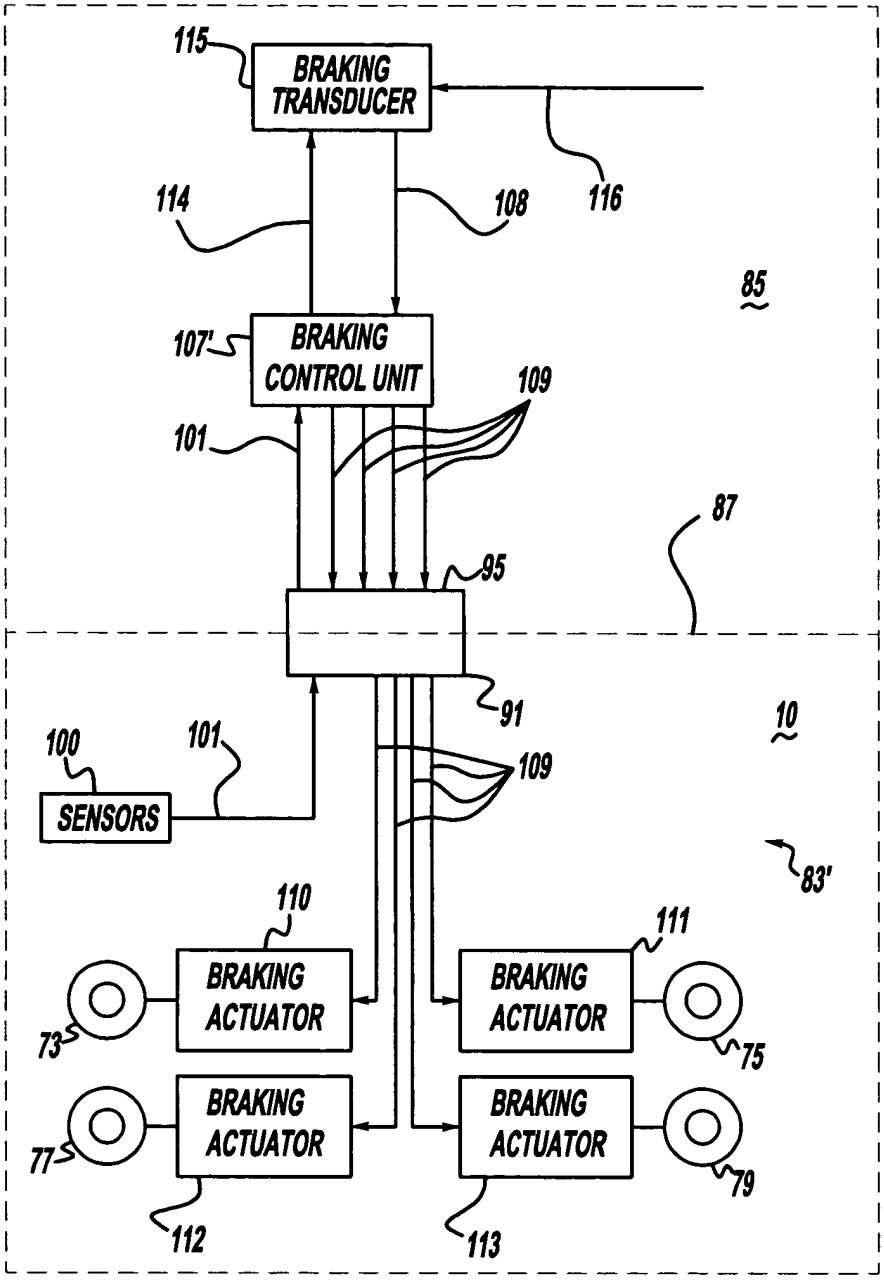
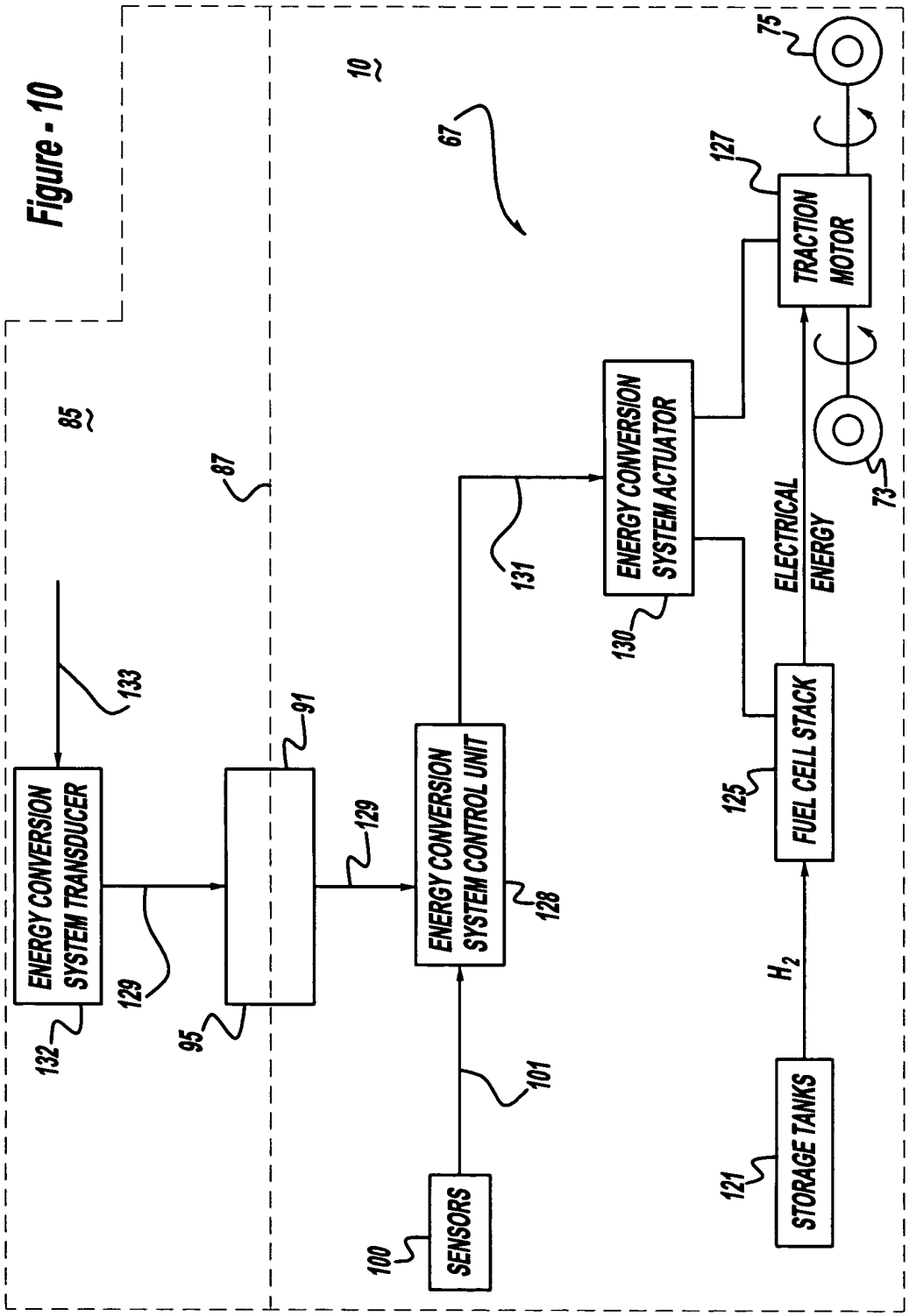

115
BRAKING TRANSDUCER
116
114
108
85
107'
BRAKING CONTROL UNIT
109
101
87
95
91
10
100
SENSORS
101
109
83'
110
111
BRAKING ACTUATOR
BRAKING ACTUATOR
73
75
BRAKING ACTUATOR
BRAKING ACTUATOR
77
79
112
113

Figure - 9

Figure - 10


10
85
87
67
75
127
TRACTION MOTOR
ENERGY CONVERSION SYSTEM ACTUATOR
131
130
ELECTRICAL ENERGY
73
ENERGY CONVERSION SYSTEM TRANSDUCER
133
132
129
95
91
129
ENERGY CONVERSION SYSTEM CONTROL UNIT
128
FUEL CELL STACK
125
H_2
101
SENSORS
100
STORAGE TANKS
121

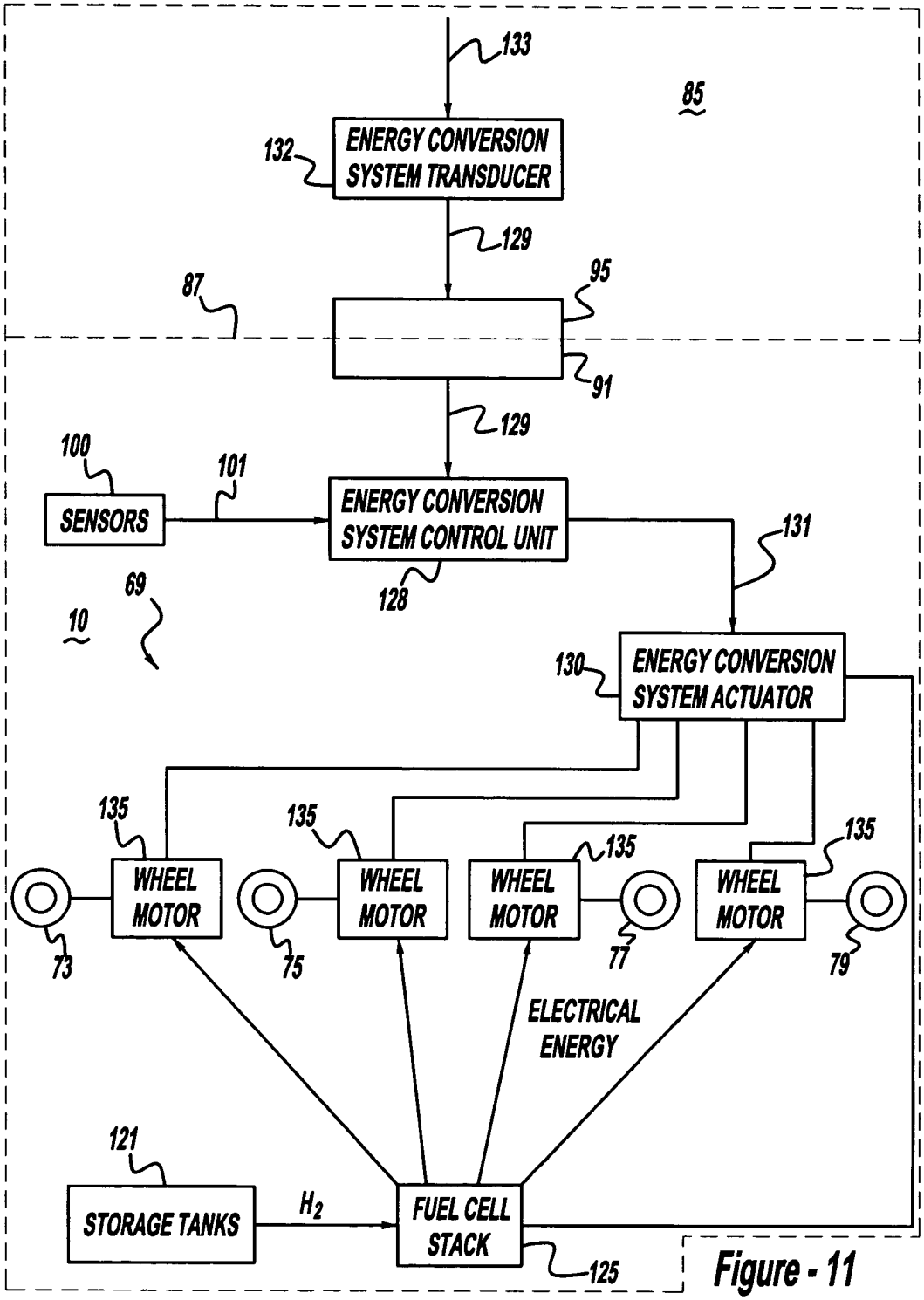

133
85
132
ENERGY CONVERSION SYSTEM TRANSDUCER
129
87
95
91
129
100
101
SENSORS
ENERGY CONVERSION SYSTEM CONTROL UNIT
131
128
69
10
130
ENERGY CONVERSION SYSTEM ACTUATOR
135
135
135
135
WHEEL MOTOR
WHEEL MOTOR
WHEEL MOTOR
WHEEL MOTOR
73
75
77
79
ELECTRICAL ENERGY
121
STORAGE TANKS
H_2
FUEL CELL STACK
125

Figure - 11

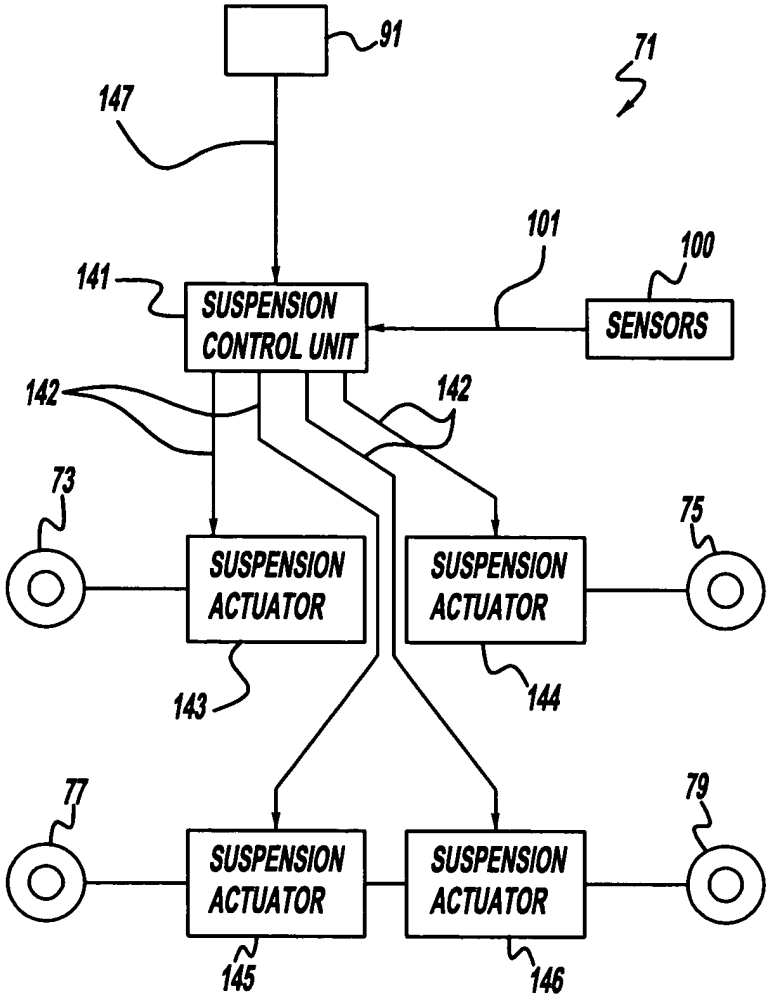

91
71
147
101
100
141
SUSPENSION CONTROL UNIT
SENSORS
142
142
73
75
SUSPENSION ACTUATOR
SUSPENSION ACTUATOR
143
144
77
79
SUSPENSION ACTUATOR
SUSPENSION ACTUATOR
145
146

Figure - 12

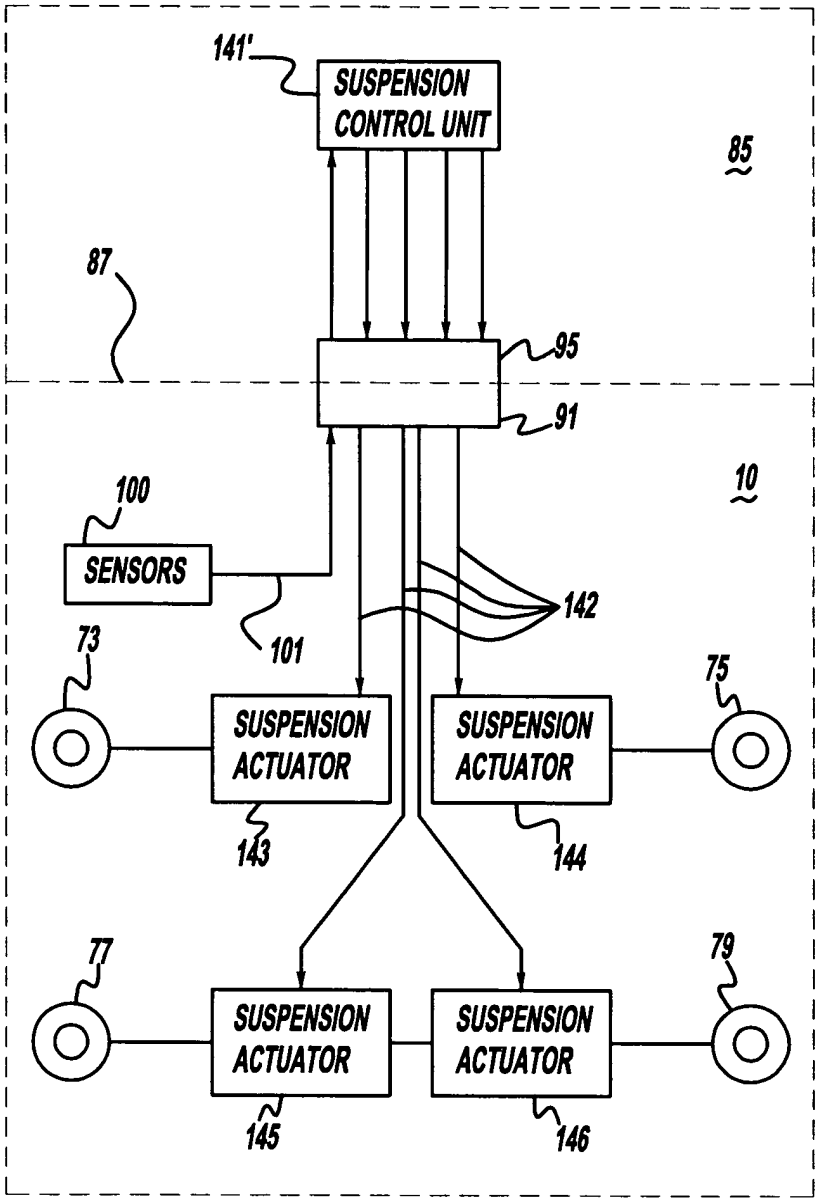

141'
SUSPENSION CONTROL UNIT
85
87
95
91
10
100
SENSORS
101
142
73
75
SUSPENSION ACTUATOR
SUSPENSION ACTUATOR
143
144
77
79
SUSPENSION ACTUATOR
SUSPENSION ACTUATOR
145
146

Figure - 13

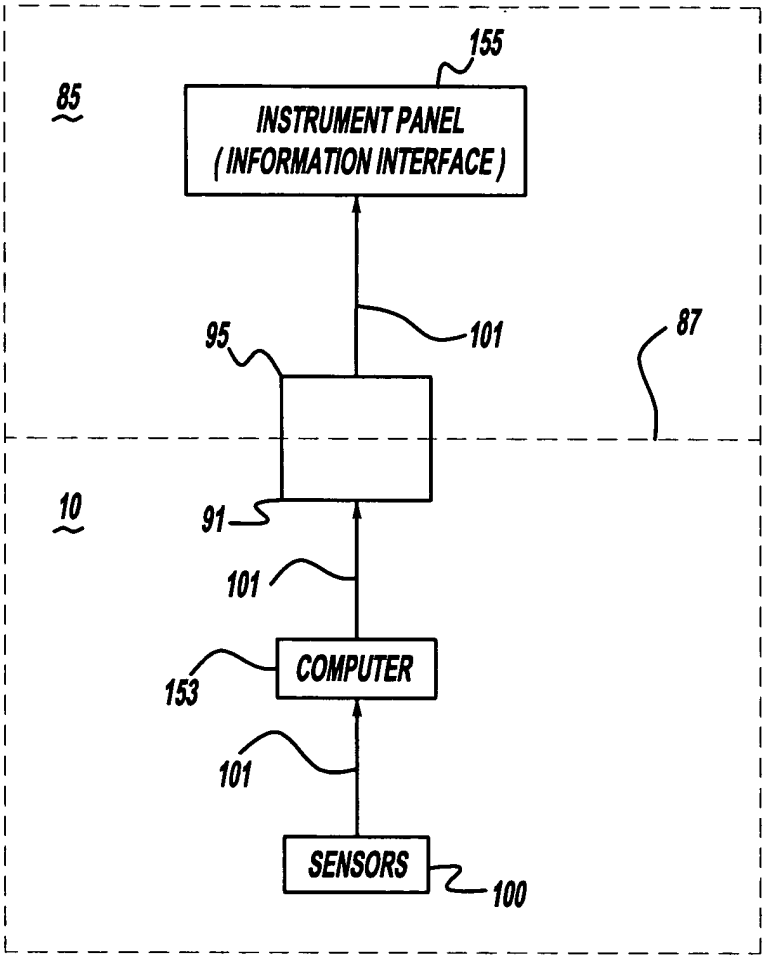

155
85
INSTRUMENT PANEL
(INFORMATION INTERFACE)
95
101
87
10
91
101
153
COMPUTER
101
SENSORS
100

Figure - 14

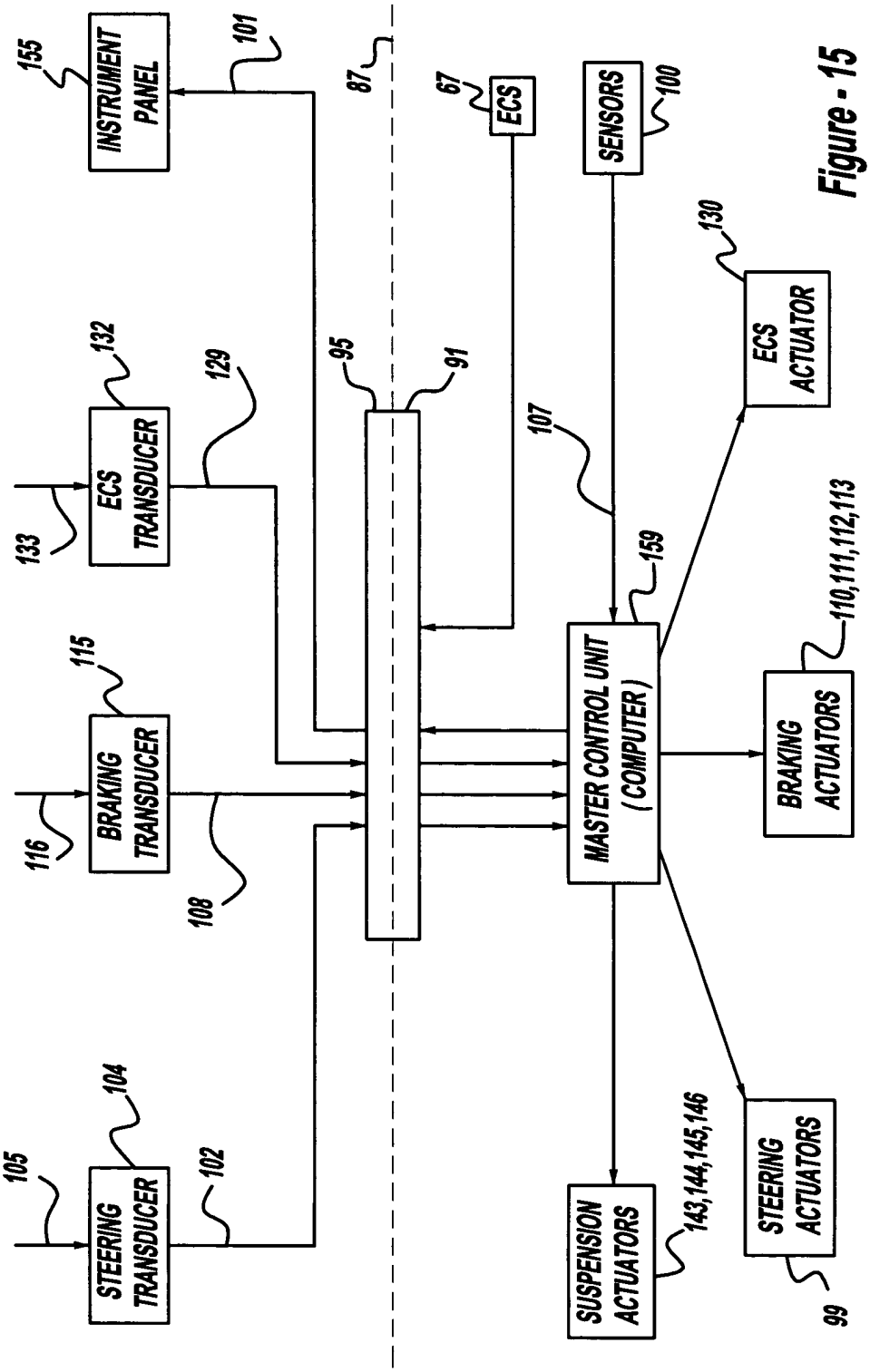

155
INSTRUMENT PANEL
101
87
67
ECS
SENSORS
100
132
ECS TRANSDUCER
129
95
91
130
ECS ACTUATOR
133
107
115
BRAKING TRANSDUCER
159
MASTER CONTROL UNIT (COMPUTER)
110,111,112,113
BRAKING ACTUATORS
116
108
105
104
STEERING TRANSDUCER
102
SUSPENSION ACTUATORS
143,144,145,146
STEERING ACTUATORS
99

Figure - 15

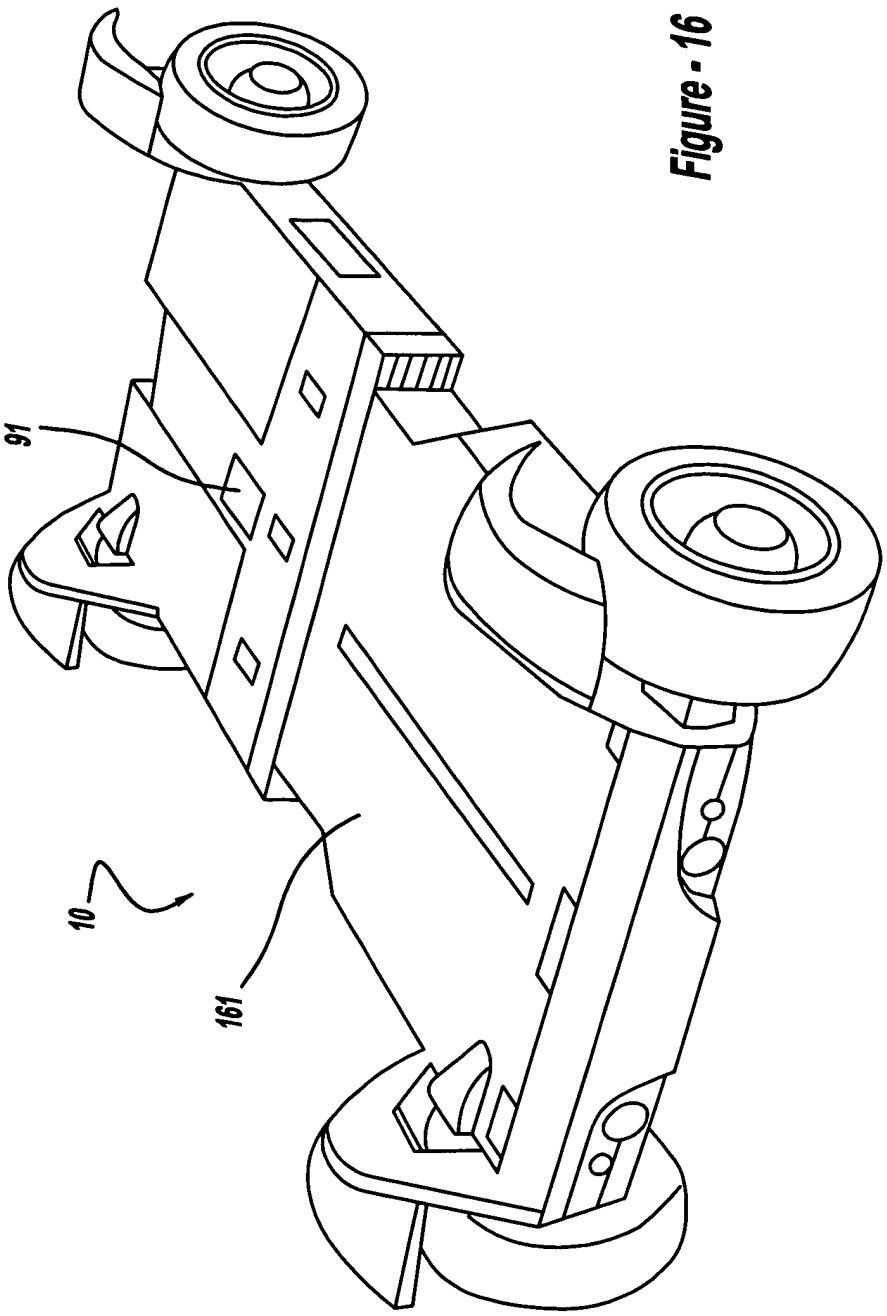


Figure - 16

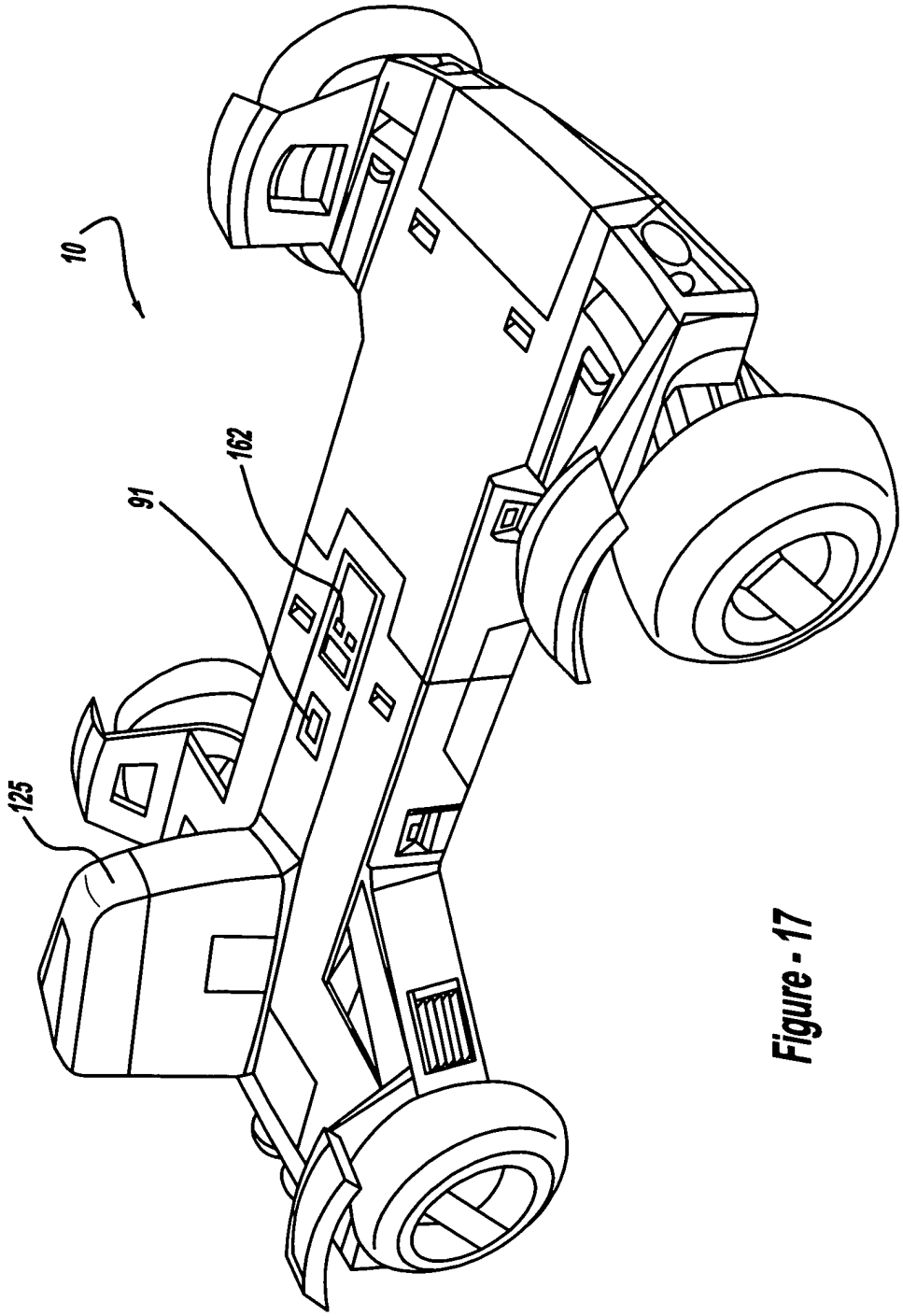


Figure - 17

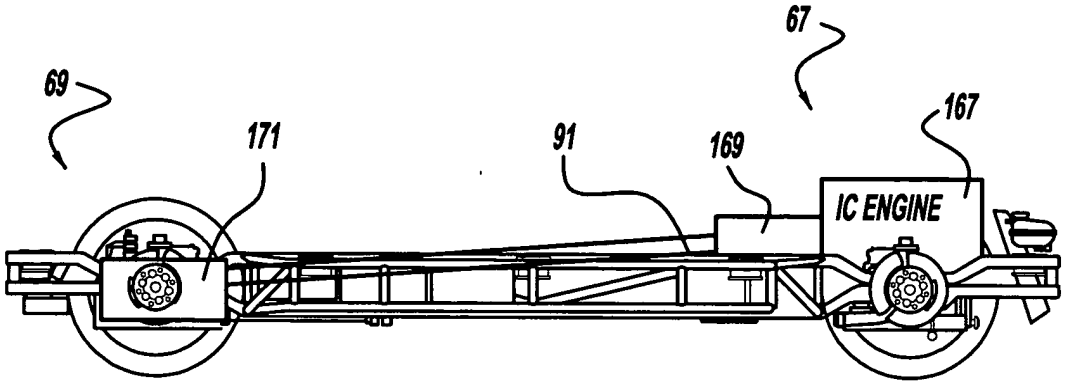


Figure - 18

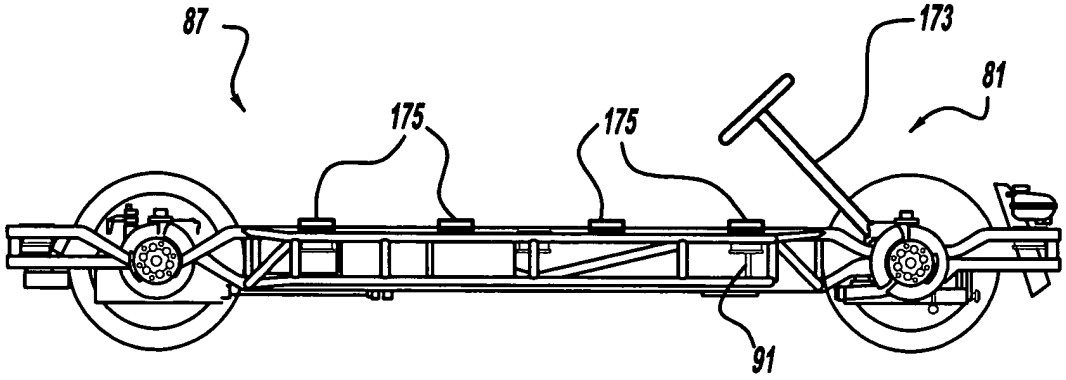


Figure - 19

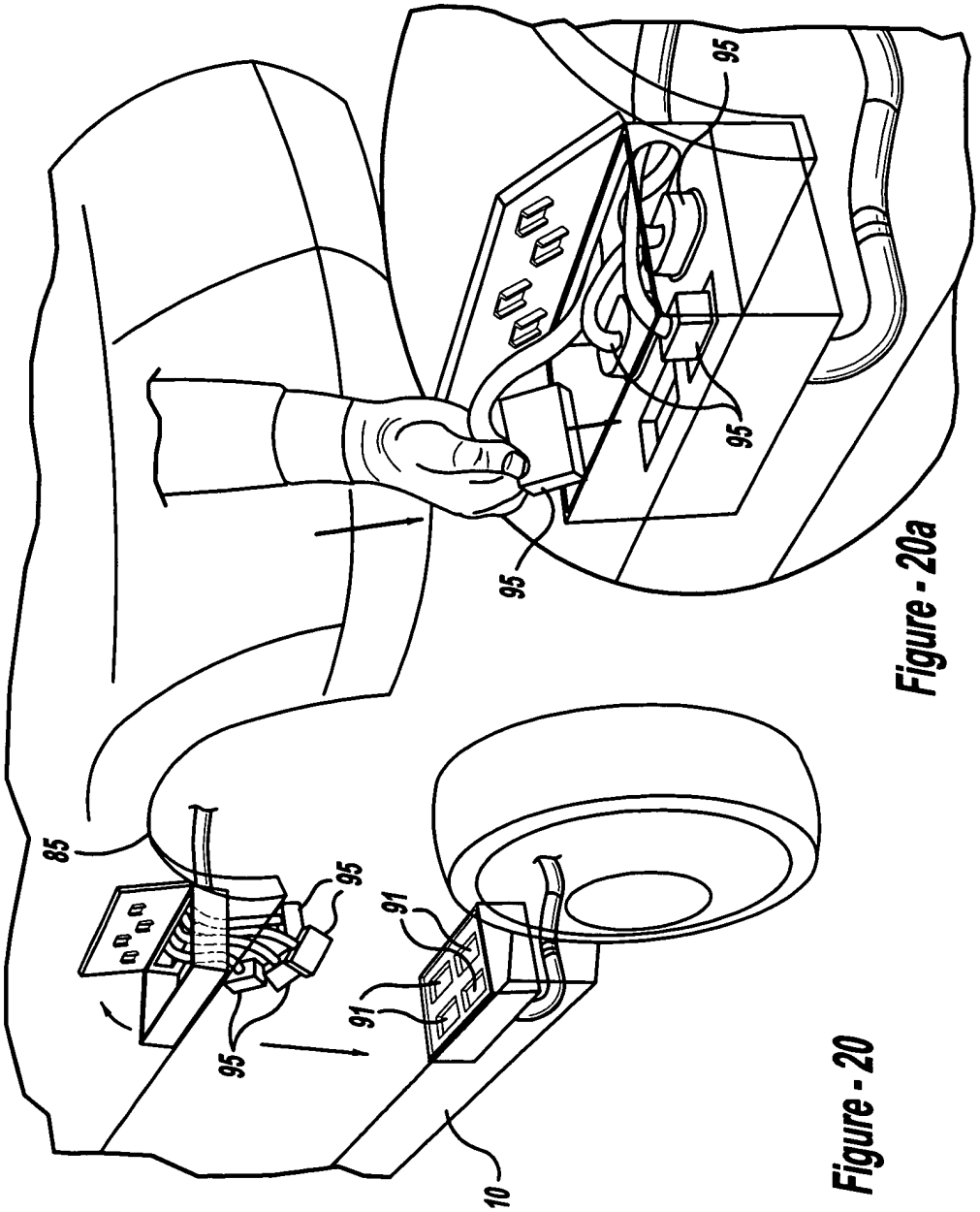


Figure - 20a

Figure - 20

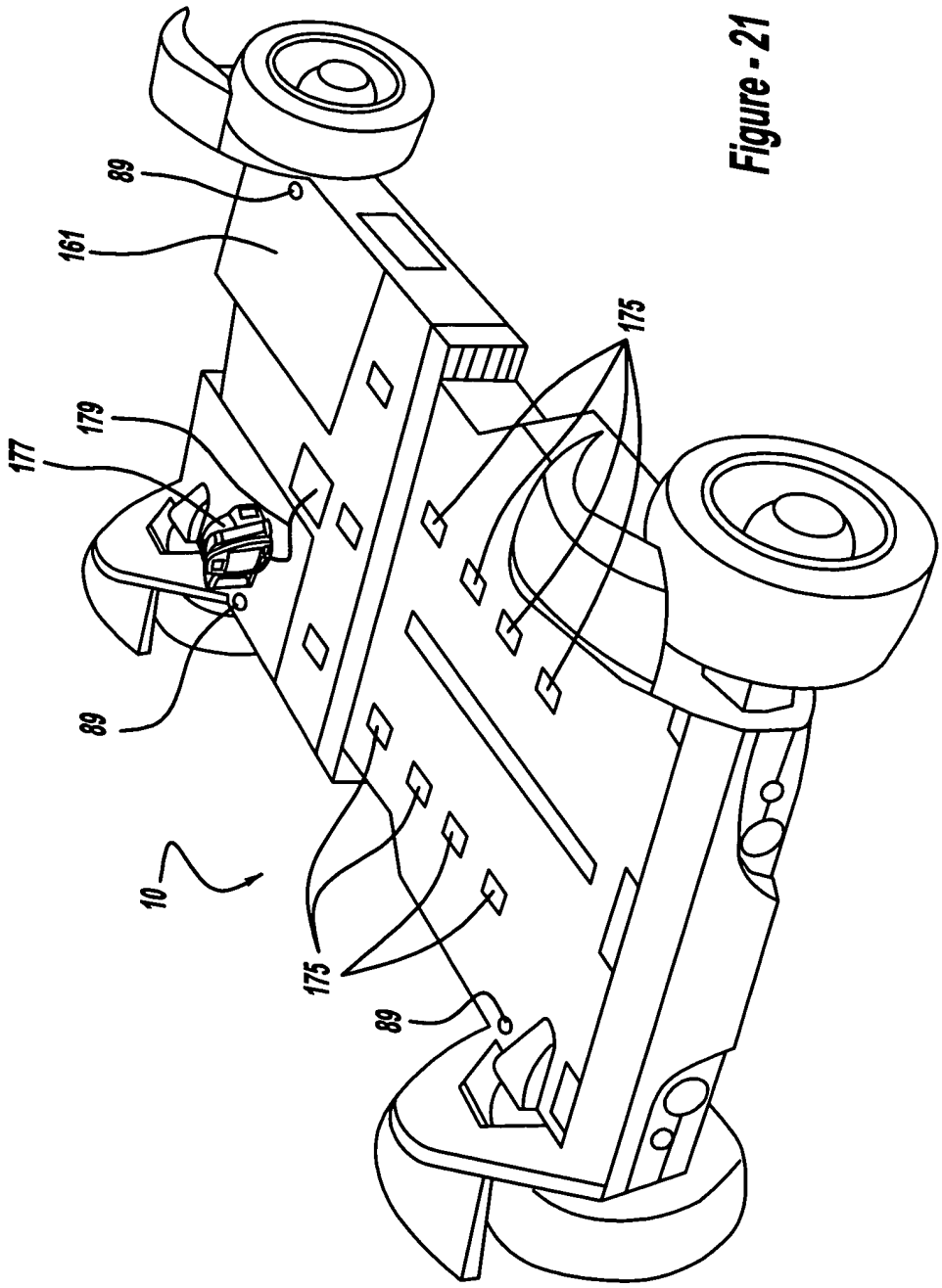


Figure - 21

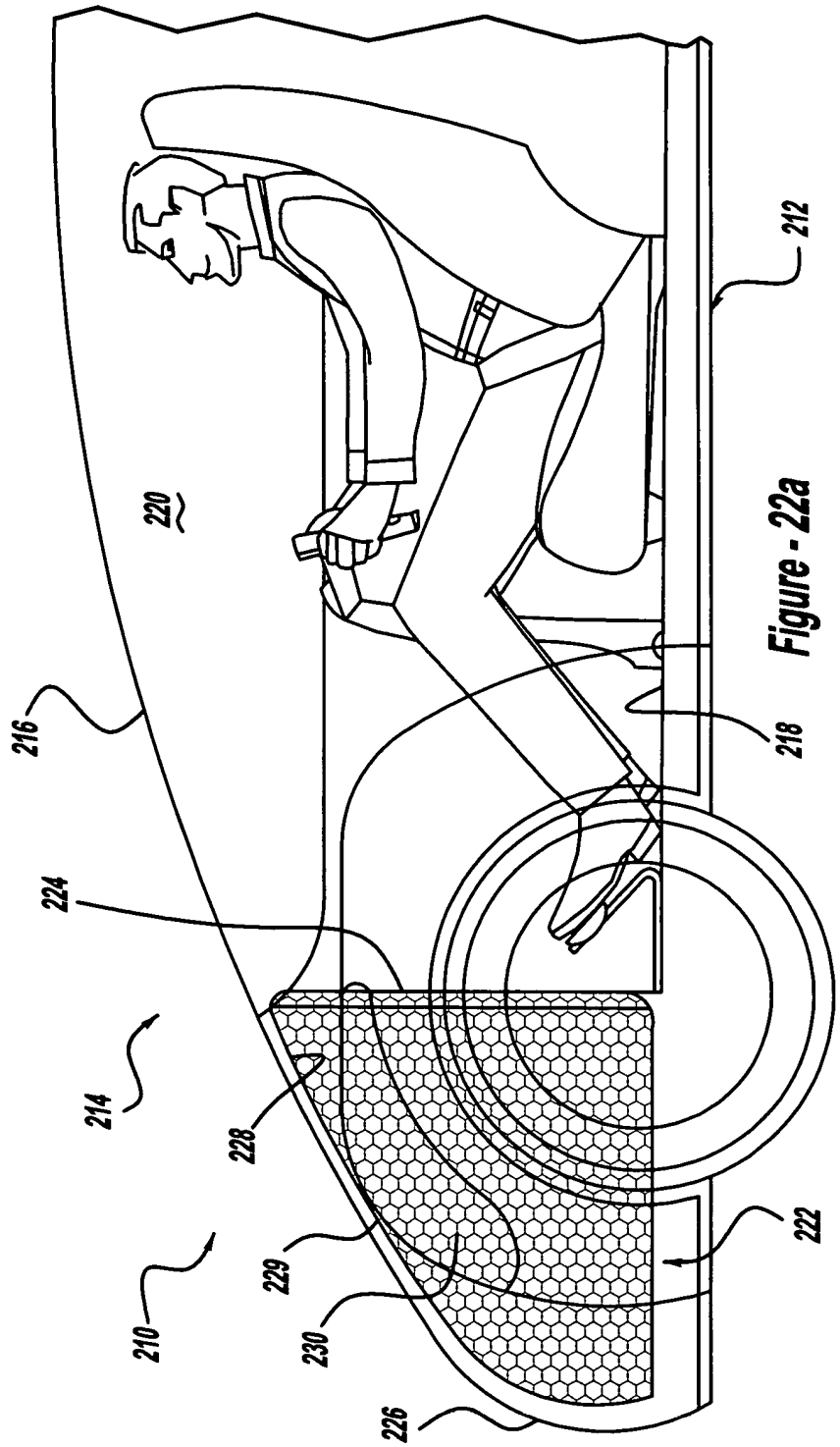


Figure - 22a

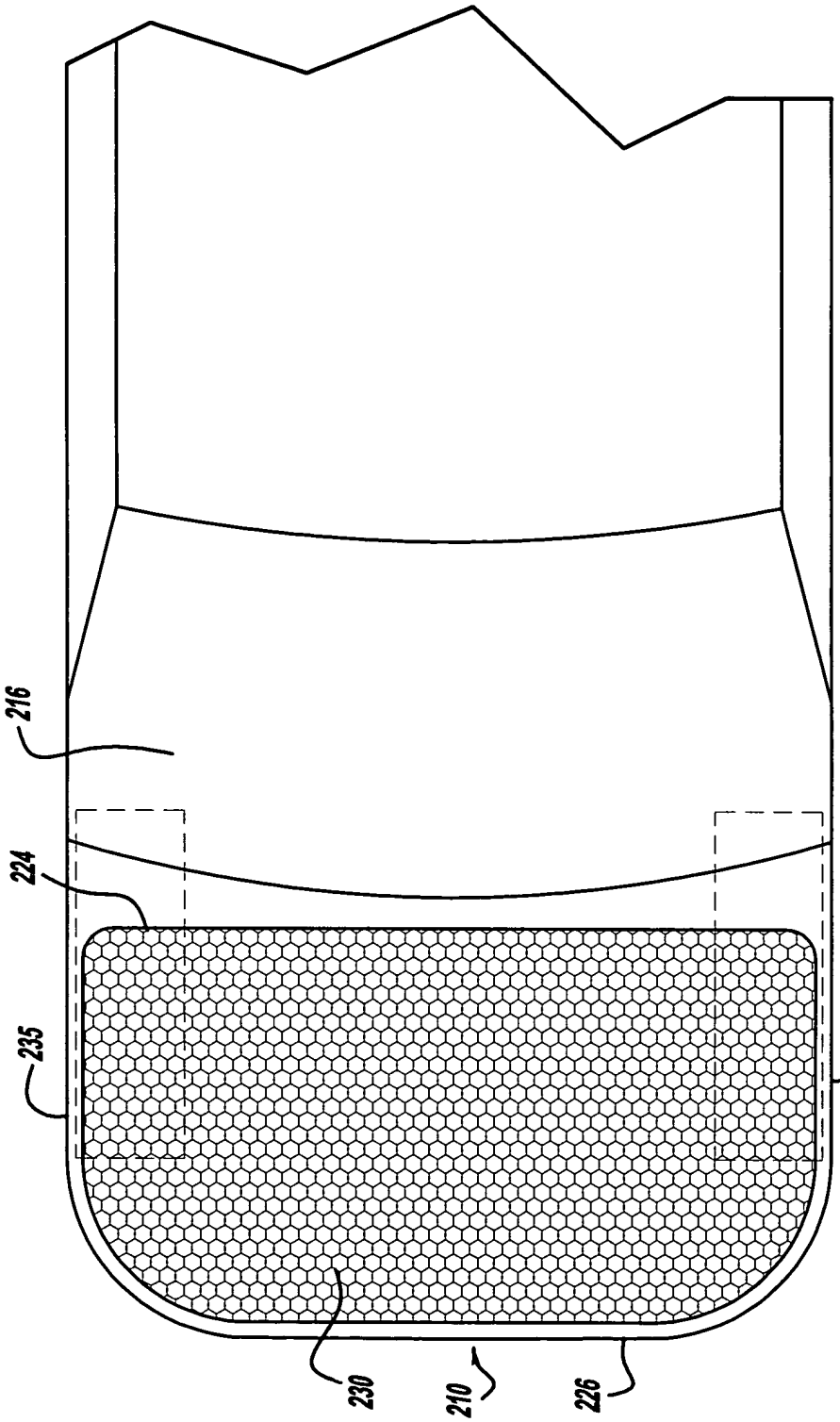


Figure - 22b

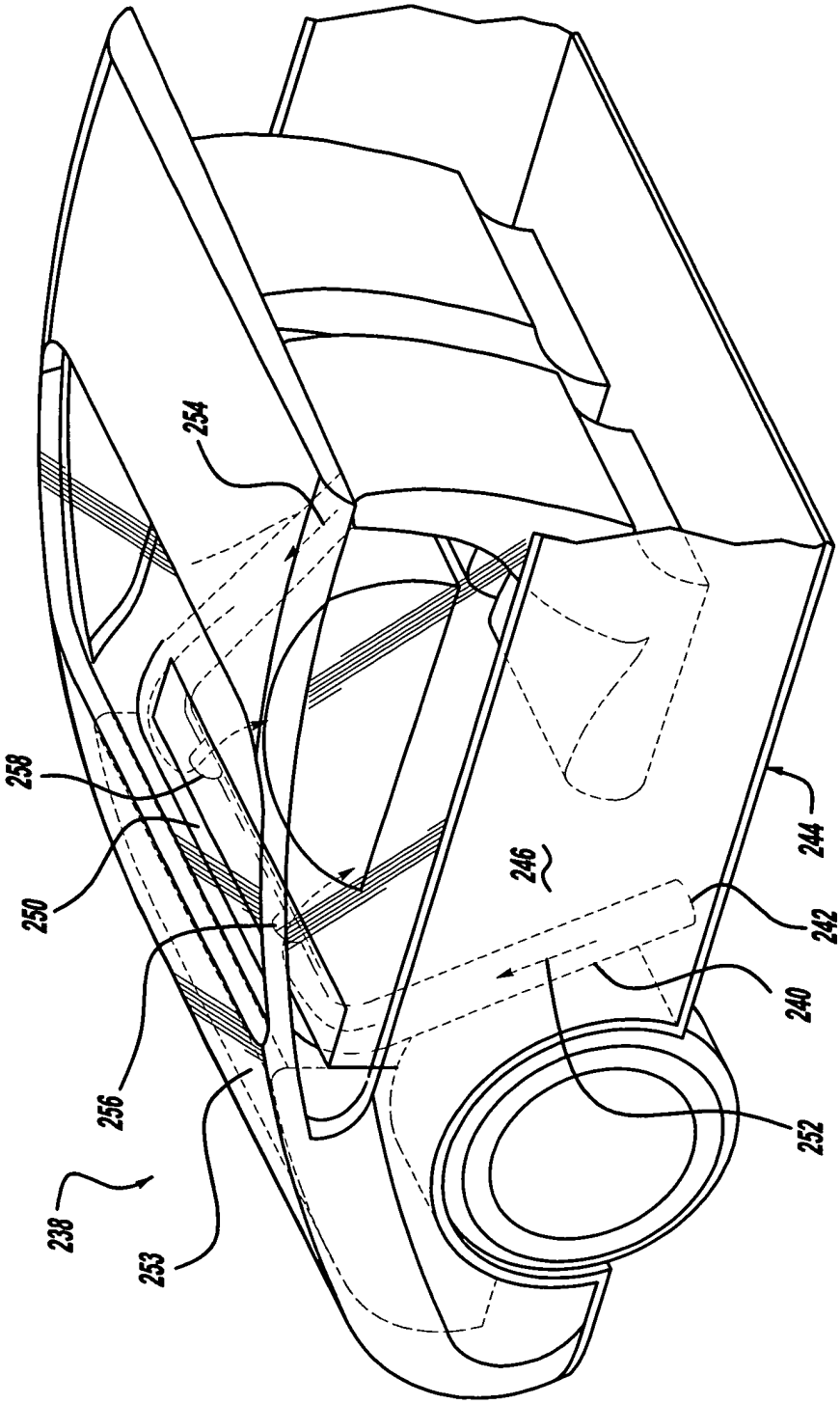


Figure - 23

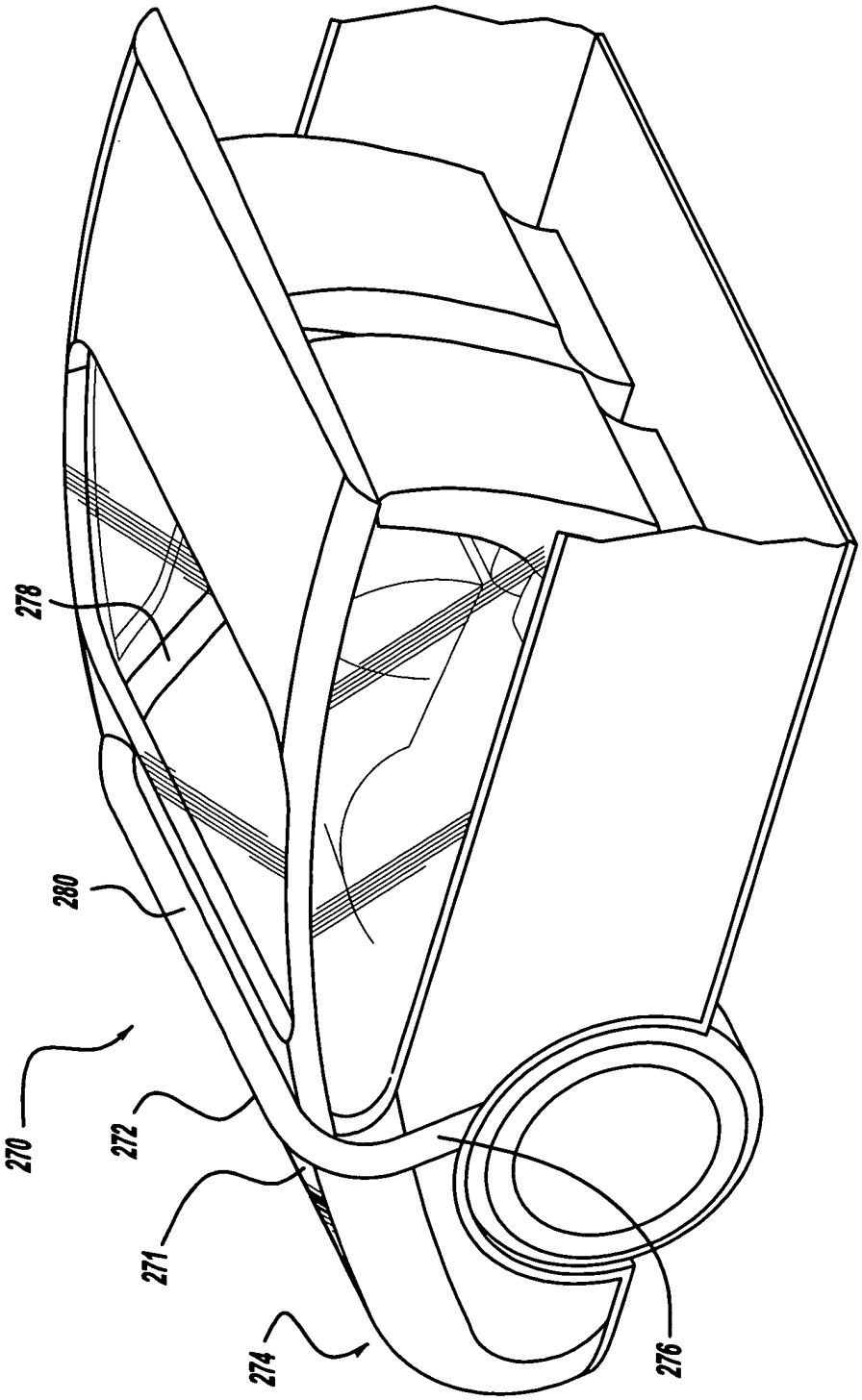


Figure - 24

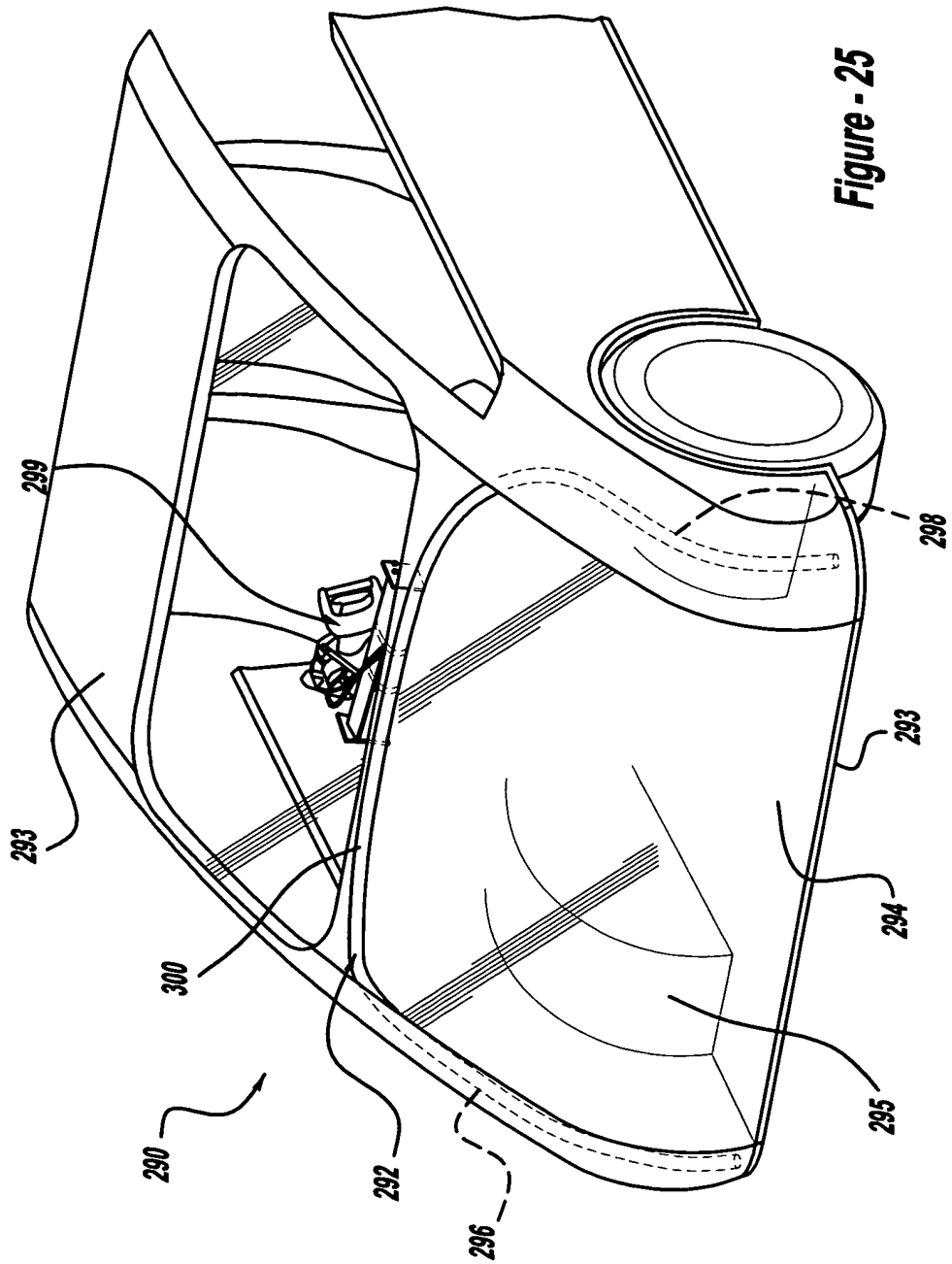
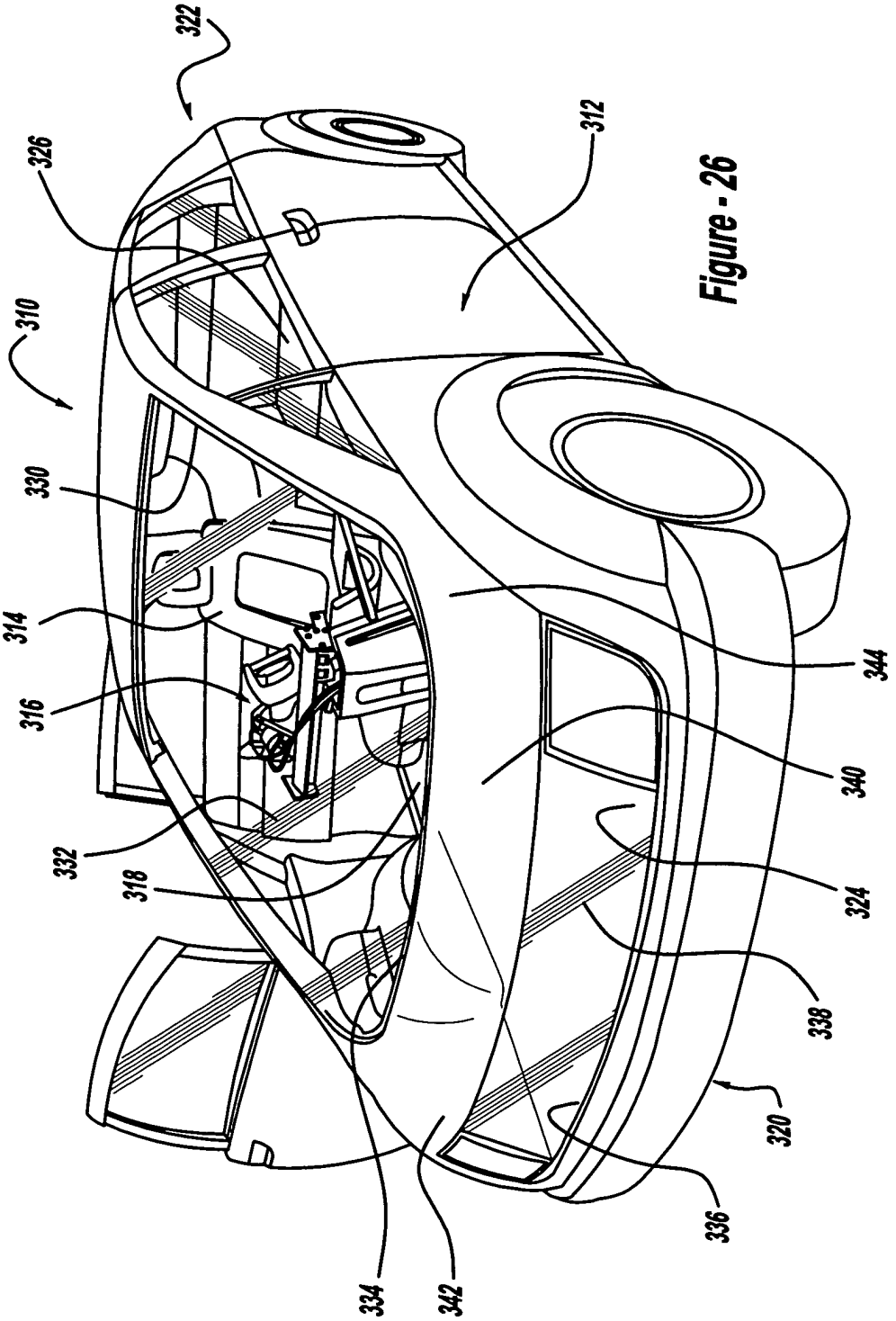


Figure - 25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342

Figure - 26